WHAT IS CLAIMED IS:

1. A method of detecting a cancer cell in a patient, the method comprising contacting a biological sample from the patient with a polynucleotide that selectively hybridizes to a chemokine receptor polynucleotide.

2. The method of claim 1, wherein the chemokine receptor is CXCR4 and the biological sample is designed for the detection of ovarian cancer cells, bladder cancer cells, lung cancer cells, head and neck cancer cells, renal cancer cells, stomach cancer cells, uterine cancer cells, colorectal cancer cells, acute lymphoblastic leukemia cells, prostate cancer cells, pancreatic cancer cells, or cervical cancer cells.

3. The method of claim 1, wherein the chemokine receptor is CCR2 and the biological sample is designed for the detection of glioblastoma cancer cells.

4. The method of claim 1, wherein the chemokine receptor is CCR1 and the biological sample is designed for the detection of glioblastoma, or pancreatic cancer cells.

5. The method of claim 1, wherein the chemokine receptor is CCR4 and the biological sample is designed for the detection of ovarian cancer cells, head and neck cancer cells, renal cancer cells, stomach cancer cells, uterine cancer cells, glioblastoma or colorectal cancer cells.

6. The method of claim 1, wherein the chemokine receptor is CCR5 and the biological sample is designed for the detection of prostate cancer cells, head and neck cancer cells, renal cancer cells, stomach cancer cells, uterine cancer cells, colorectal cancer cells, pancreatic cancer cells, or ovarian cancer cells.

7. The method of claim 1, wherein the chemokine receptor is CCR7 and the biological sample is designed for the detection of renal cancer cells, pancreatic cancer cells, or stomach cancer cells.

8. The method of claim 1, wherein the chemokine receptor is CCR8 and the biological sample is designed for the detection of glioblastoma or prostate cancer cells.

9. The method of claim 1, wherein the chemokine receptor is CX3CR1 and the biological sample is designed for the detection of glioblastoma or pancreatic cancer cells.

10. The method of claim 1, wherein the chemokine receptor is CXCR3 and the biological sample is designed for the detection of glioblastoma cells.

11. The method of claim 1, wherein the chemokine receptor is CXCR6 and the biological sample is designed for the detection of lung cancer cells, bladder cancer cells, prostate cancer cells, breast cancer cells, pancreatic cancer cells, or colorectal cancer cells.

12. The method of claim 1, wherein the patient is undergoing a therapeutic regimen to treat cancer.

13. The method of claim 1, wherein the patient is suspected of having cancer.

14. A method of detecting a cancer cell in a biological sample from a patient, the method comprising contacting the biological sample with an anti-chemokine receptor antibody or a chemokine.

15. The method of claim 14, wherein the chemokine receptor is CXCR4 and the biological sample is designed for the detection of ovarian cancer cells, bladder cancer cells, lung cancer cells, head and neck cancer cells, renal cancer cells, stomach cancer cells, uterine cancer cells, colorectal cancer cells, acute lymphoblastic leukemia cells, prostate cancer cells, pancreatic cancer cells, or cervical cancer cells.

16. The method of claim 14, wherein the chemokine receptor is CCR2 and the biological sample is designed for the detection of glioblastoma cancer cells.

17. The method of claim 14, wherein the chemokine receptor is CCR1 and the biological sample is designed for the detection of glioblastoma or pancreatic cancer cells.

18. The method of claim 14, wherein the chemokine receptor is CCR4 and the biological sample is designed for the detection of ovarian cancer cells, head and neck cancer cells, renal cancer cells, stomach cancer cells, uterine cancer cells, glioblastoma, or colorectal cancer cells.

19. The method of claim 14, wherein the chemokine receptor is CCR5 and the biological sample is designed for the detection of prostate cancer cells, head and neck

cancer cells, renal cancer cells, stomach cancer cells, uterine cancer cells, colon cancer cells, pancreatic cancer cells, or ovarian cancer cells.

20. The method of claim 14, wherein the chemokine receptor is CCR7 and the biological sample is designed for the detection of renal cancer cells, pancreatic cancer cells, or stomach cancer cells.

21. The method of claim 14, wherein the chemokine receptor is CCR8 and the biological sample is designed for the detection of glioblastoma, or prostate cancer cells.

22. The method of claim 14, wherein the chemokine receptor is CX3CR1 and the biological sample is designed for the detection of glioblastoma or pancreatic cancer cells.

23. The method of claim 14, wherein the chemokine receptor is CXCR3 and the biological sample is designed for the detection of glioblastoma cells.

24. The method of claim 14, wherein the chemokine receptor is CXCR6 and the biological sample is designed for the detection of lung cancer cells, bladder cancer cells, prostate cancer cells, breast cancer cells, pancreatic cancer cells, or colorectal cancer cells.

25. The method of claim 14, wherein the patient is undergoing a therapeutic regimen to treat cancer.

26. The method of claim 14, wherein the patient is suspected of having cancer.